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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,866	09/10/2003	Sarah E. Zeller	200209040-1	5129

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HEWLETT-PACKARD COMPANY
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EXAMINER

CULLER, JILL E

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

10/659,866

Applicant(s)

ZELLER ET AL.

Examiner

Jill E. Culler

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-18 and 21-25 is/are rejected.
- 7) ☒ Claim(s) 12, 19-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "98" has been used to designate both a concentric axle and a notch. See Figure 10. It appears that applicant may have intended to use reference numeral "92" for the axle instead.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: On page 6, line 5, it appears that "he" should be "the" instead.

Appropriate correction is required.

Claim Objections

3. Claims 4-8 and 25 are objected to because of the following informalities:

In claim 4, although the disclosure indicates that "one or more output trays" is the structure of the first means of separating, the claim language does not connect the two.

Applicant appears to be claiming additional structure instead.

In claim 5, on line 3, the word "wherein" appears to be unnecessary.

In claim 6, on line 1, it appears that "a" should be "an" instead.

In claim 25, the recitation of "said first means" has no antecedent basis. The examiner has interpreted the claim limitation in light of the specification and the other claims, however this must be addressed.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5, 18, 23 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 2,589,676 to Crissy.

With respect to claims 1-2, Crissy teaches a printer collator comprising first means, 35, see column 3, lines 1-11, for selectively separating printer output, see

column 1, lines 1-7, and second means, 27, 28, coupled to the first means for angling and/or rotation the first means based on the printer output.

With respect to claim 3, Crissy teaches the second means includes a controller, 108, which includes third means, 93, for generating control signals to control the second means to facilitate automatic positioning of the first means to selectively separate the physical output. See column 4, lines 64-69 and column 5, lines 11-59.

With respect to claim 4, Crissy teaches the second means includes a curved surface, 27, 28, in communication with one or more output trays, 35, said curved surface and positions of said output trays on said curved surface controllable via a motor, 44a, which is responsive to said control signals. See column 4, lines 39-44 and column 5, lines 11-59.

With respect to claim 5, Crissy teaches the second means includes adjustable output media guides, 55, 56, for facilitating directing said physical output into an appropriate output tray, 35, and the curved surface is fitted with a curved track, 27, 28, having said one or more output trays positioned thereon. See column 3, lines 37-54.

With respect to claim 18, Crissy teaches a collator comprising one or more output trays, 35, a track, 27, 28, enabling varying positions of said one or more output trays; and means, 44a, for selectively positioning said output trays about a longitudinal axis of said track to enable filling of each of said output trays. See column 2, line 32-column 3, line 15 and column 4, lines 39-44.

With respect to claim 23, Crissy teaches a system for organizing printer output comprising compartments, 35, adapted to accommodate printer output media; a motor,

44a, in communication with said compartments; and a controller, 108, in communication with said motor, said controller generating control signals to said motor to selectively position said compartments about a curved track, 27, 28, to direct said printer output media into a desired one of said compartments. See column 2, line 32-column 3, line 15, column 4, lines 39-44 and column 5, lines 11-59.

With respect to claim 25, Crissy teaches a method for organizing printer output comprising the steps of: selectively separating printer output and facilitating automatic nonlinear positioning of a first means, 35, about a curved track, 27, 28, based on said printer output. See column 2, line 32-column 3, line 15.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6-7, 10-11, 13-17 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crissy in view of U.S. Patent No. 5,898,592 to Salgado et al.

With respect to claim 6, Crissy teaches all that is claimed, as in the above rejection of claims 1-5, 18, 23 and 25 except that said second means includes an output media level sensor in communication with said controller, said third means generating a control signal to said motor effective to position a different output tray in an output path

when said output media level sensor indicates that an output tray currently being filled is full.

Salgado et al. teaches an output media level sensor, in communication with said controller, said third means generating a control signal to said motor effective to position a different output tray in an output path when said output media level sensor indicates that an output tray currently being filled is full. See column 9, line 60 - column 10, line 3 and column 12, lines 1-39.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the output media level sensor of Salgado et al. with the collator of Crissy in order to be able to continue sorting media without operator intervention when a particular tray is filled.

With respect to claim 7, Crissy teaches that said output trays, 35, are positioned approximately perpendicular to said curved track and are rotatable about an axis of said track. See column 2, line 57 - column 3, line 11 and Figures 1 and 4 in particular.

With respect to claims 10-11, Crissy teaches a collator comprising first means for accommodating output in different positions, which includes one or more output compartments defined by one or more output trays, see column 3, lines 1-11, and third means coupled to said first means for facilitating automatic positioning of said first means. See column 5, lines 11-59.

Crissy does not teach a second means for sensing a property associated with said output and providing a signal in response thereto, or positioning said first means in response to said signal to facilitate organization of said output.

Salgado et al. teaches a second means for sensing a property associated with said output and providing a signal in response thereto, or positioning said first means in response to said signal to facilitate organization of said output. See column 9, line 60 - column 10, line 3 and column 12, lines 1-39.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the sensor means of Salgado et al. with the collator of Crissy in order to be able to continue sorting media without operator intervention when a particular tray is filled.

With respect to claim 13, Crissy does not teach said second means includes a controller in communication with software, said software allowing a user to specify a type of output.

Salgado et al. teaches a controller in communication with software, said software allowing a user to specify a type of output. See column 12, lines 40-59.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the software of Salgado et al. in communication with the controller of Crissy in order to be able to better control the separation of the physical output.

With respect to claims 14-15, Crissy teaches said third means includes a curved track, 27, 28, having said one or more output trays, 35, mounted thereon, said curved track accommodating different tray positions and a motor, 44a, in communication with said curved track for selectively actuating one or more of said output trays to one or more of said different tray positions in response to said signal. See column 2, line 32- column 3, line 15 and column 4, lines 39-44.

With respect to claims 16-17, Crissy does not said second means includes a paper level sensor mounted adjacent to said one or more output trays, or said third means includes fourth means for re-directing said output to a different output tray in response to a signal output from said paper level sensor.

Salgado et al. teaches a paper level sensor, mounted adjacent to said one or more output trays and fourth means for re-directing said output to a different output tray in response to a signal output from said paper level sensor. See column 9, line 60 - column 10, line 3 and column 12, lines 1-39.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the paper level sensor of Salgado et al. with the collator of Crissy in order to be able to continue sorting media without operator intervention when a particular tray is filled.

With respect to claim 24, Crissy teaches compartments, 35, adapted to accommodate printer output media, said compartments attached to a curved track; 27, 28, a motor, 44a, in communication with said compartments; and a controller, 108, in communication with said motor, said controller generating control signals to said motor to selectively position said compartments about said curved track to direct said printer output media into a desired one of said compartments. See column 2, line 32-column 3, line 15, column 4, lines 39-44 and column 5, lines 11-59.

Crissy does not teach an efficient printer capable of organizing printer output comprising first means for generating an image on printer output media.

Salgado et al. teaches an efficient printer, 14, capable of organizing printer output comprising first means for generating an image on printer output media. See column 8, 50-64.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the printer of Salgado et al. with the collating system of Crissy in order to be able to directly separate the printer output as it is being produced.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crissy in view of Salgado et al. as applied to claims 6-7, 10-11, 13-17 and 24 above, and further in view of U.S. Patent No. 5,551,680 to Ohmichi et al.

Crissy and Salgado et al. teach all that is claimed, as in the above rejection of claims 6-7, 10-11, 13-17 and 24, except that the curved track is shaped to enable said output trays to be sufficiently rotated to expose one or more access doors, to expose other printer features, or to selectively disable said collator.

Ohmichi et al. teaches a collator track which is shaped to enable output trays to be moved to enable access to other printer features.

It would have been obvious to one having ordinary skill in the art at the time of the invention to design the track of Crissy as modified by Salgado et al. to have spacing capabilities, as taught by Ohmichi et al., in order to allow the operator access to the printer for purposes such as removing a paper jam.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crissy in view of U.S. Patent No. 6,170,821 to Kubota.

Crissy teaches all that is claimed, as in the above rejection of claims 1-5, 18, 23 and 25 except that said second means includes means for selectively engaging or disengaging trays included in said first means to selectively move trays into desired positions.

Kubota teaches means for selectively engaging or disengaging trays to selectively move trays into desired positions. See column 4, lines 51-62.

It would have been obvious to one having ordinary skill in the art at the time of the invention to design the trays of Crissy to have the engaging and disengaging means of Kubota in order to have more flexibility for the placement of the trays.

10. Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over crissy in view of U.S. Patent No. 4,780,740 to Fukae.

Crissy teaches all that is claimed, as in the above rejection of claims 1-5, 18, 23 and 25 except one or more of said output trays are fitted with adjustable media guides to accommodate varying widths of output media, which include a gear mechanism having one or more gears and/or toothed beams to facilitate positioning said media guides.

Fukae teaches a media tray, 10, having adjustable media guides, 30, 32 to accommodate varying widths of output media, which include a gear mechanism having

one or more gears and/or toothed beams to facilitate positioning said media guides. See column 4, lines 16-33.

It would have been obvious to one having ordinary skill in the art at the time of the invention to design the trays of Crissy to have the adjustable media guides of Fukae in order to be able to smoothly guide output of varying widths.

Allowable Subject Matter

11. Claims 12 and 19-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach or render obvious a collator as claimed, particularly including means for collapsing trays, as claimed in the invention, in response to a signal to accommodate print media longer than the longest of the trays or to enable output media to pass over the trays.

Conclusion


12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 2,260,540 to Schramm, U.S. Patent No. 3,907,279 to Ervin, U.S. Patent No. 5,033,731 to Looney, U.S. Patent No. 5,035,412 to Hiroi et al., and U.S. Patent No. 6,168,145 to Tanaka et al. each teach an apparatus having obvious similarities to the claimed subject matter.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill E. Culler whose telephone number is (571) 272-2159. The examiner can normally be reached on M-Th 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jec



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